

**EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION**  
**ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES**  
**Summary sheet of validation data for a diagnostic test**

The EPPO Standard PM 7/98 *Specific requirements for laboratories preparing accreditation for a plant pest diagnostic activity* describes how validation should be conducted. It also includes definitions of performance criteria.

<b>Laboratory contact details</b>	Netherlands Institute for Vectors, Invasive plants and Plant health P.O. Box 9102, 6700 HC Wageningen, Netherlands
<b>Short description of the test</b>	Isolation of <i>Ralstonia solanacearum</i> on SMSA
<b>Date, reference of the validation report</b>	2009-09-01 - September 2009 and May 2013 - BAC-2009-01, BAC-2010-05 and BAC 2016-04 (Rosa)
<b>Validation process according to EPPO Standard PM7/98?</b>	yes
<b>Is the lab accredited for this test?</b>	no
<b>Was the validated data generated in the framework of a project?</b>	
<b>Description of the test</b>	
<b>Organism(s)</b>	<i>Ralstonia solanacearum</i> species complex(RALSSO)
<b>Detection / identification</b>	detection
<b>Method(s)</b>	Isolation
<b>Method: Isolation</b>	
<b>Reference of the test description</b>	
<b>Other information</b>	
<b>Other details on the test</b>	Isolation on semi-selective SMSA
<b>Performance Criteria :</b>	
<b>Organism 1.:</b>	<b><i>Ralstonia solanacearum</i> species complex(RALSSO)</b>
<b>Analytical sensitivity</b>	
<b>What is smallest amount of target that can be detected reliably?</b>	From potato tuber $3 \times 10^2$ cfu/ml, From pelargonium petioles $6,5 \times 10^2$ cfu/ml From Rosa $8,6 \times 10^2$ cfu/ml . From water samples $3 \times 10^1$ cfu/ml,
<b>Diagnostic sensitivity</b>	
<b>Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98</b>	100%
<b>Standard test(s)</b>	Real time PCR for identification of <i>Ralstonia solanacearum</i> (Weller et al., 2000)

<b>Analytical specificity - inclusivity</b>	
<b>Number of strains/populations of target organisms tested</b>	24 strains of <i>Ralstonia solanacearum</i> (different race/biovar combinations)
<b>Specificity value</b>	100%
<b>Analytical specificity - exclusivity</b>	
<b>Number of non-target organisms tested</b>	37 strains of non-target organisms that can be found on potato tubers, water and ornamental plants
<b>Specificity value</b>	Some growth on SMSA by <i>Pseudomonas andropogonis</i> , <i>Burkholderia cepacia</i> , <i>Ralstonia pickettii</i> and <i>Pseudomonas syzygii</i> , however colony morphology is not typical for <i>Ralstonia solanacearum</i> (negative results)
<b>Diagnostic Specificity</b>	
<b>Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test</b>	100%
<b>Specify the test(s)</b>	Real time PCR for identification of <i>Ralstonia solanacearum</i> (Weller et al., 2000)
<b>Reproducibility</b>	
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	100%
<b>Repeatability</b>	
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	100%
<b>Test performance study</b>	
<b>Test performance study?</b>	no
The following complementary files are available online:	
	<ul style="list-style-type: none"> <li>• <a href="#">BAC-1010-005 methodevalidatie kweek <i>Ralstonia solanacearum</i> in <i>Pelargonium</i> en water v2</a></li> <li>• <a href="#">BAC-2016-04 verslag labvalidatie kweek <i>Rsol</i> FyloTYPE I vanuit <i>Rosa</i> sp.</a></li> <li>• <a href="#">Validation of the isolation of <i>Ralstonia solanacearum</i> from potato tuber extract</a></li> </ul>

Creation date: 2015-12-02 00:00:00 - Last update: 2021-06-29 11:49:50